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ELENA M. CUTHBERTSON

**PATENT APPLICATION  
IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

IN THE APPLICATION OF  
MOTOHIRO YAMAHARA, ET AL.

SERIAL NO.: 10/521,843

FILED: JANUARY 18, 2005

TITLE: DENDRITIC POLYMER AND ELECTRONIC DEVICE ELEMENT  
EMPLOYING THE POLYMER

DOCKET NO.: SHARP-2

EXAMINER: UNKNOWN

ART UNIT: UNKNOWN

WILMINGTON, DE

DATE: October 7, 2005

**INFORMATION DISCLOSURE STATEMENT**

Mail Stop Amendments  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

In compliance with the applicants' duty of disclosure under 37 CFR 1.56, and the requirements of 37 CFR 1.97 and 1.98, and to aid in the search and examination of the above identified application, the applicants note and enclose a copy of each of the following references:

Yamamoto, et al.	Japanese Patent Application Laid-Open No. 07-126616
Hitachi, Ltd., et al.	Japanese Patent Application Laid-Open No. 08-018125
Cambridge, et al.	Japanese Patent Application Laid-Open No. 10-092576
Mitsubishi	Japanese Patent Application Laid-Open No. 63-076378
Mitsubishi	Japanese Patent Application Laid-Open No. 2000-336171
Res Dev Corp.	Japanese Patent Application Laid-Open No. 04-133351
Mitsubishi	Japanese Patent Application Laid-Open No. 05-110069
Matsushita	Japanese Patent Application Laid-Open No. 07-206599
Tosoh	Japanese Patent Application Laid-Open No. 10-310561

Stanley Elec.                      Japanese Patent Application Laid-open No. 09-059355

Samuel, et al.                      WO 99/21935

*Synthesis, Light Emission, and Optical Limiting of Hyperbranched Poly[Phenylene-alt-(2,5-Thienylene)s]*, Luo, J. et al., Polymer Preprints, vol.42, no.2, 2001, pgs. 527-528, XP009020396.

*Poly(Amidoamine)(Pamam) Dendrimers: From Biomimicry to Drug Delivery and Biomedical Applications*, Esfand, R., et al., Drug Discovery Today, Elsevier Science Ltd, GB, vol.6 no. 8, April 2001 (2001-04), pgs. 427-436, XP001029831 ISSN: 1359-6446.

*Pentacene-Based Organic Thin-film Transistors*, Yen-Yi Lin et al., IEEE Transactions on Electron Devices, vol. 44, No. 8 p. 1325-1331 (1997)

*Electrically Conducting Dendrimers*, L.L. Miller, et al.; J. Am. Chemistry Society, vol. 119, p. 1005-1010 (1997)

Masaaki Kakimoto, Chemistry, vol. 50, p. 608-612 (1995)

*Dendritic Macromolecules*, Masaaki Kakimoto, Kobunshi (High Polymers, Japan) vol. 47, p. 804-807 (1998)

*Conducting Polymer and Its Electronically and Optically Functional Devices*, Katsumi Yoshino, Mitsuyoshi Onoda, Polymer Electronics, Japan, Corona, p. 32. (1996)

*Dodensei Kobunshi No Kiso To Oyo*, Base and applications Conductive Polymers, IPC, p. 24

*Starburst Molecules for Amorphous Molecular Materials*, Shirota, Kobata, and Noma, Chemistry Letters, p. 1145-1148 (1989)

*Palladium-Catalyzed Cross-Coupling Reactions of Aryl and Vinylic Boron Compounds with Organic Halides*, Miyaura and Suzuki, Yuki Gosei Kagaku Kyokai Shi, Journal of Synthetic Organic Chemistry, Japan, vol. 46, p. 848 - 860 (1988)

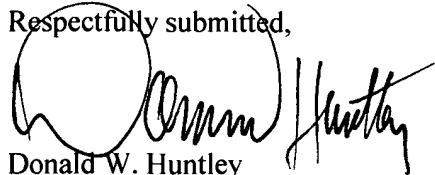
*Palladium-Catalyzed Cross-Coupling Reactions of Organoboron Compounds*, Miyaura and Suzuki, Chemistry Rev., vol. 95, pgs. 2457-2483 (1995)

*Recent Advances in the Cross-Coupling Reactions of Organoboron Derivatives with Organic Electrophiles*, Suzuki, Journal of Organometallic Chemistry, vol. 576, pgs. 147-168 (1999)

Applicant: Motohiro Yamahara, et al.  
Serial No.: 10/521,843  
Filing Date: January 18, 2005  
Pg. 3

English abstracts or concise English language explanations of each of the  
above patent publications are also enclosed along with a copy of PTO form 1449.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Donald W. Huntley", is written over a circular stamp that is mostly blank.

Donald W. Huntley  
Attorney for Applicants  
Registration No. 24,673

emc

Enclosures

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Substitute for form 1449/PTO

PTO/SB/08A (08-03)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

**(Use as many sheets as necessary)**

Sheet	1
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of 2

Attorney Docket Number

Sharp-2

**Complete if Known**

Application Number

10/521,843
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Filing Date

January 18, 2005

**First Named Inventor**

Motohiro Yamahara

## Art Unit

**Examiner Name**

Attorney Docket Number

Sharp-2

## U. S. PATENT DOCUMENTS

[illegible]

## FOREIGN PATENT DOCUMENTS

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known)	MM-DD-YYYY			
		JP-07-126616	05-16-1995	Yamamoto Ryuich		
		JP-08-018125	01-19-1996	Hitachi, Ltd		
		JP-10-092576	04-10-1998	Cambridge Displ		
		JP-63-076378	04-06-1988	Mitsubishi Elec		
		JP-2000-336171	12-05-2000	Mitsubishi Chem		
		JP-04-133351	05-07-1992	Res Dev Corp of		

Examiner Signature	Date Considered
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This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Substitute for form 1449/PTO

**(Use as many sheets as necessary)**

Application Number	10/521,843
Filing Date	January 18, 2005
First Named Inventor	Motohiro Yamahara
Art Unit	
Examiner Name	
Attorney Docket Number	Sharp-2

Sheet	2	of	2
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		Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known)				
		JP-05-110069	04-30-1993	Mitsubishi Elec		
		JP-07-206599	08-08-1995	Matsushita Elec		
		JP-10-310561	11-24-1998	Tosoh Group		
		JP-09-059355	03-04-1997	Agency of IND S		
		WO 99/21935	05-06-1999	Isis Innovation		

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Substitute for form 1449/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(Use as many sheets as necessary)</i>		<b>Complete if Known</b>	
		Application Number	10/521,843
		Filing Date	January 18, 2005
		First Named Inventor	Motohiro Yamahara
		Art Unit	
		Examiner Name	
Sheet 1	of 2	Attorney Docket Number	Sharp-2

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		LUO, PENG, CHENG, ZHONG TANG, Synthesis, Light Emission, and Optical Limiting of Hyperbranched Poly[Phenylene-alt-(2,5-Thienylene)s], Polymer Preprints, 2001, p. 527-528.	
		ESFAND, TOMALIA, Poly(Amidoamine)(Pamam) Dendrimers: From Biomimicry to Drug Delivery and Biomedical Applications, Drug Discovery Today, April 8, 2001,p.427-436, Vol. 6, No. 8	
		LIN, GUNDLACH, NELSON, JACKSON, Pentacene-Based Organic Thin-film Transistors, IEEE Transctions on Electron Devices, August 8, 1997, p1325-1331, Vol 44, No. 8.	
		MILLER, DUAN, TULLY, TOMALIA, Electrically Conducting Dendrimers, Journal American Chemistry Society,1997, p. 1005-1010, Vol.119, No. 5.	
		KAKIMOTO, Chemistry, 1995, p. 608-612, Vol. 50.	
		KAKIMOTO, Dendritic Macromolecules, Kobunshi High Polymers,1998, p.804-807, Vol. 47. Japan.	
		YOSHINO, ONODA, Conducting Polymer and Its Electronically and Optically Functional Devices, Polymer Electronics, 1996, p.32, Corona, Japan.	
		Dodensei Kobunshi No Kiso To Oyo,Base and Applications Conductive Polymers, p. 24 IPC, Japan.	
		SHIROTA,KOBATA,NOMA, Starburst Molecules for Amorphous Molecular Materials, Chemistry Letters, 1989, p. 1145-1148.	
		MIYAURA, SUZUKI,Yuki Gosei Kagaku Kyokai Shi, Palladium-Catalyzed Cross-Coupling Reactions of Aryl and Vinylic Boron Compounds with Organic Halides, Journal of Synthetic Organ	

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		MIYAURA, SUZUKI, Palladium-Catalyzed Cross-Coupling Reactions of Organoboron Compounds, Chemistry Rev., 1995, p. 2457-2483, Vol 95, No. 7	
		SUZUKI, Recent Advances in the Cross-Coupling Reactions of Organoboron Derivatives with Organic Electrophiles 1995-1998, Journal of Organometallic Chemistry, 1999, pgs. 147-168	

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